Alternative Narrowing Process

Small Isolated Delta Conveyance Facility

Alternative 3D

Alternatives 3D and 3B are identical except for the type of isolated facility used to convey 5,000 cfs from a diversion on the Sacramento River at Hood to the Clifton Court Forebay. Alternative 3D proposes a pipeline option for the isolated facility, while alternative 3B proposes an open canal

Canal (Alt 3B)	Pipeline (Alt 3D)
Pumping plant lift: 10 ft	Pumping Plant lift: 150 ft
Length of canal: 44 miles	Length of pipeline: 44 miles
Canal: trapezoidal section 340 ft wide, 27 ft deep	Pipeline: three side-by-side buried 18 foot inside diameter concrete pipelines
Width of Right-of-Way: 1,000 ft	Width of Right-of-Way: 500 ft
Right-of-Way: 5,330 acres	Right-of-Way: 2,515 acres
Siphon crossings under all waterways	Pipeline crossing under all waterways
Bridges over canal for all county roads, state highways, and railroads	Pipeline crossing under all county roads, state highways
Potential for recreation and waterfowl habitat areas	Potential for wildlife habitat established over buried pipeline
Vulnerable to introduction of pollutants	Water quality protected
Easier to construct turnouts to service areas	More difficult to turnout for service areas
Easier to increase the capacity of the canal at some future date	Need to bury another pipeline to increase capacity in future. An assurance against expansion.
Energy cost: \$1 Million/year	Energy Cost: \$12 Million/year
Capital Cost: \$857 Million	Capital Cost: \$2,067 Million

Recommendation:

Given that the alternatives 3B and 3D are identical except for the conveyance method, the environmental impacts of both alternatives can be mitigated so that the difference between the impacts are slight, and the conveyance method in 3D costs 2 to 3 times that of 3B, it is recommended that alternative 3B adequately represents the alternative concept and alternative 3D be dropped from consideration

Draft - For Discussion Only

July 15, 1997